

SPECIFICATION AMENDMENTS

Sir:

Please amend in the specification the first paragraph beginning on page 2 of the application as follows:

Animal feed requires a protein component. In addition to the carcasses which can be processed for protein recovery, feathers are inexpensive and also high in protein, however, feathers are difficult for animals to digest. And, although there are processes known for forming feather meal, often these processes require steam which, if too hot, will denature the proteins in the feathers and reduce their nutritional values. It is also known that certain bacterial strains produce ~~keritinase~~ keratinase which is an enzyme capable of degrading feathers and that, properly employed, such degradation can result in material that can be used in animal feeds. See U.S. Pat. No. 4,908,220; 4,959,311.

Sir:

Please amend in the specification the paragraph beginning on line 9, page 4 of the application as follows:

The enzymatic digest medium of the preferred embodiment includes protease/~~keritinase~~ keratinase, inedible egg, water, and a preservative. The digest medium mixing assembly is equipped with a pH probe and monitor which triggers the addition of an acidic solution as needed to adjust the pH of the enzymatic digest.

Sir:

Please amend in the specification the paragraph beginning on page 7 and ending on page 8 of the application as follows:

In general, the process is shown in Fig. 2 and Fig. 8 and requires that an enzymatic digest medium 18 of a particular pH level be prepared and stored until such

time as it is needed. The medium of the preferred embodiment comprises enzymes 204, inedible egg 206, a preservative 208 and water. The enzymes 204 may include protease to break down and digest most proteins, and ~~keritinase~~ keratinase to aid in digestion of feathers and the preferred embodiment contemplates a mixture of preservative 2 lbs/ton, enzyme 1 1/2 lbs/ton, and the remainder per ton of inedible egg. The preservative 208 restricts multiplication of bacteria or microorganisms which could adversely affect the end product. An example of one such preservative 208 is sodium meta-bisulfite. Although inedible egg is a logical choice when the apparatus is used in conjunction with poultry production, other fluid wastes such as outdated ice cream, molasses, milk by products, and others that include proteins, fat, and water could be appropriately substituted.

Sir:

Please amend in the specification ~~the first paragraph beginning on page 11 of the application as follows:~~

The enzymatic digest medium 18 of the preferred embodiment includes, per ton, about 2 1/2 pounds of protease and ~~keritinase~~ keratinase 204, about 2 pounds of preservative 208, and the remaining pounds inedible egg and water 206. The pH is lowered to about 5 by addition of phosphoric acid 36. This pH level is optimal for this particular enzymatic digest medium, however a range from about 4 - 6 may be effective and the amount of enzyme may be altered according to the speed of digestion desired and the enzymes used.